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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/782,896  
Filing Date: February 13, 2001  
Appellant(s): KIKINIS, DAN

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Chunhsi Andy Mu  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed August 20, 2009 appealing from the Office action mailed February 4, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

No amendment after final has been filed.

**5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

2005/0166224	Ficco	7-2005
6,556,196	Blanz et al.	4-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-2, 4-8, 10-14, 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ficco (US PG PUB: 2005/0166224) in view of Blanz et al. (US Pat. 6,556,196)

With regard to claims 1, 7, 13 and 19, Ficco discloses a method for providing enhanced advertising of a 2-D broadcast comprising:

Receiving the 2-D video broadcast including a first advertisement having a 2-D image (broadcast of programs and advertisements, see [0021]);

Ficco discloses that objects in advertisements can be replaced, enhanced, added, removed, etc. with additional data in an effort to make the advertisement more appealing to the user (see abstract, [0056], [0059]). Accordingly the system comprises the method of identifying the 2-D image within the first advertisement, wherein the 2-D image is identified based on its characteristics and exclusively at a viewer's equipment in order to determine how the object must be processed further;

Ficco discloses that various objects/portions of advertisements can be obtained during off peak times and stored in memory (see [0036], [0037]). Additional data such as texture that can be mapped on to objects in the ad maybe received via input paths (such as point to point feed 10 [0062]), wherein data received from input paths are stored in memory devices ([0030], [0038]).

Memory/library comprising various advertising related data are indexed to facilitate retrieval according to a desired factor (see [0036], [0043]). Accordingly Ficco further teaches the step of looking-up of a corresponding (i.e. matching) advertising data (i.e. selection of the appropriate data) in an image library using a look up table (i.e. advertisement components are stored according to an index value, and thus necessarily comprise a look up table to facilitate retrieval of the components according to desired the index value, see [0036]), the library comprises a plurality of advertising data.

Using a retrieved advertising component/object/data to generate an enhanced rendering of the first advertisement such as by adding texture maps (see [0056], [0062]), integrating wire frame into advertisement (see [0058]), adding/changing various objects within advertisement (see [0059]), etc.

While Ficco discloses the use of enhancing objects in an advertisement using wireframe models and/or texture mapping to give objects in an advertising a more “appealing” form, Ficco does not expressly state that the enhancement object comprise 3-D objects.

In a similar field of endeavor, Blanz discloses a method of creating a 3D representation of a 2D image by matching a morphable 3D object to the 2D image to create a 3D rendering of the images in video programs/movies. See abstract, column 3, lines 32-38, col. 13 lines 10-13. Blanz discloses a database comprising 3D objects (e.g. human faces, col. 12, lines 19-21) from which a 3D object is supplied to the object analyzer. This additionally reads on “looking up a matching 3-D object in a image library, wherein the library comprises one or more 3-D objects”. The object analyzer further utilizes the supplied 3D object to generate a 3D rendering of a 2D input image (col. 12, lines 30-36). The morphing/warping of the 2D image to the 3D object creates a final product wherein the underlying structure is defined by characteristics of the 3-D object (i.e. face structure) while the overlaying surface is defined by characteristics of the 2-D image (see, col. 7, lines 60-61, col. 8 lines 7-10), further exemplified in fig. 7 illustrating a 3D object “pushed” into the face of Mona Lisa painting to create a 3-D highlighted rendering of Mona Lisa.

It would have been obvious to one of ordinary skill in the art to modify the system of Ficco in view of Blanz by generating a 3D rendering of certain 2D objects thereby adapting certain features of the advertisement for enhancements by creating an realistic depiction of the 2D object. Such an enhanced realistic rendering of certain objects in the advertisement might increase the impact of the advertising on a user, affecting the viewer’s buying decision and thereby resulting in higher sales volume (see Ficco: [0007], [0085], [0086]).

With regard to claims 2, 8, 14, and 20 an advertisement of the modified system comprises a video, wherein it is noted that video comprises a plurality 2D images .

With regard to claims 4, 10, 16 and 22, the enhanced advertisement in the modified system is displayed on a television. See Ficco: [0086].

With regard to claims 5, 11, 17, Blanz further discloses the step of overlaying the 2-D image on the matching 3-D object to create a 3-D rendering of the 2D image (col. 7, lines 60-61, col. 8, lines 6-10.

With regard to claims 6, 12, and 18, the modified system further discloses the method of overlaying specular lighting and shading over the image (Blanz column 9, lines 10-15 and lines 40-44..

With regards to claim 21, advertisement components in the modified system are stored according to an index value, and thus necessarily comprise a look up table to facilitate retrieval of the components according to desired the index value, (see Ficco [0036]).

#### **(10) Response to Argument**

The examiner respectfully disagrees that the rejection should be reversed. Only those arguments having been raised are being considered and addressed in the Examiner's Answer. Any further arguments regarding other elements or limitations not specifically argued or any other reasoning regarding deficiencies in a prima facie case of obviousness that the appellant could have made are considered by the examiner as

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having been conceded by the appellant for the basis of decision of this appeal. They are not being addressed by the examiner for the Board's consideration. Should the panel find that the examiner's position/arguments or any aspect of the rejection is not sufficiently clear or a particular issue is of need of further explanation, it is respectfully requested that the case be remanded to the examiner for further explanation prior to the rendering of a decision. See 37 CFR 41.50(a)(1) and MPEP 1211.

Appellant argues (see Brief, page 5) that, "Ficco fails to teach or suggest that the maps or wire frame models are stored in memories 22-28". Ficco however discloses that various objects/portions of advertisements can be obtained during off peak times and stored in memory (see [0036], [0037]). Advertisement components for enhancement, such as texture that can be mapped on to objects in the ad maybe received via input paths (such as point to point feed 10 [0062]), wherein data received from input paths are stored in memory devices ([0030], [0038]). Furthermore, Blanz discloses that a database comprising 3D objects (e.g. human faces, col. 12, lines 19-21) from which a 3D object is supplied to the object analyzer. This additionally reads on "looking up a matching 3-D object in a image library, wherein the library comprises one or more 3-D objects".

Appellant argues (see Brief, page 5) that, "[a]dding texture to certain objects does not constitute looking up of a 3-D object and using the 3-D object to generate an enhanced first advertisement because a texture does not correspond to a 3-D object", stating(see Brief, page 5) that, "the texture is at best a 3-D image, not a 3-D object" and therefore, "Ficco clearly does not teach or suggest looking up the 3-D object based on a



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received 2-D image as recited in claims 1, 7, 13 and 19". As stated above, Ficco discloses various methods enhancement objects can be stored in memory. While Ficco is silent on specifically storing 3D objects, Blanz further discloses the step of looking up a matching 3D object from a 3D database 20 (col. 12, lines 19-21) to render a 3D version of a 2D image (see col. 12, lines 30-34), wherein such 3D rendering of 2D images can be applied to video/movie sequences (col. 13, lines 10-13). Accordingly it is within the level of one of ordinary skill in the art to enhance a 2D image by looking up a corresponding 3D object from a library/database to create a 3D rendering of the 2D object.

Appellant argues (see Brief, page 5) that, "Ficco describes use of the same or original alleged 3-D object (i.e. wireframe), thereby eliminating a need, reason or motivation to look up a matching wireframe model when processing a broadcast advertisement", stating (see Brief, page 5) that, "since Ficco starts with an original wireframe, looking up a 3-D object corresponding to the wireframe would be nonsensical" because Ficco states (see [0090]) that, "Johnny Unitas could be texture mapped onto a wireframe model *of the original quarterback* in a broadcast football game". As noted above, Ficco and Blanz discloses storing various enhancement objects that can be used in rendering an enhanced view of a 2D image. Additionally, consider the scenario where a user may have a liking for both Kathy Ireland, and Johnny Unitas, however may not want a female model to be rendered with Johnny Unitas texture map. Accordingly in such scenarios, even though the system may store enhancement objects pertaining to both Kathy Ireland and Johnny Unitas, the user may find it desirable to

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have all the female models enhanced with the likeness of Kathy Ireland and not Johnny Unitas. In such cases it is desirable to look up a “matching” enhancement object (i.e. enhance with Kathy Ireland rather than Johnny Unitas). Similarly, even though the user may express a high interest cars, it maybe advantageous to enhance the advertisements containing cars by generating a 3D rendering of the car, but not desirable to replace human beings in an advertisement with 3D object of the car. Accordingly in its broadest reasonable interpretation, such matching reads on scenarios comprising matching female 3D object to female 2D image, or matching of a human 3D object to human 2D image.

Appellant further argues (see Brief, page 6) that, “Ficco clearly does not teach or suggest looking up matching 3-D object, much less a library thereof”. However, Ficco further notes that stored objects maybe indexed [0036], facilitating looking up of objects according to indexed characteristics as well as Blanz disclosing the step of looking up a matching 3D model from a 3D database 20 (col. 12, lines 19-21).

Appellant argues (see Brief, page 6) that, “Blanz does not teach or suggest pushing 3-D object onto a 2-D image as recited in claim 1. Instead, Blanz merely describes morphing (e.g. changing 3-D parameters) of a 3-D model based on a 2-D image”. Examiner however notes that the morphing/warping of the 2D image to the 3D object creates a final product wherein the underlying structure is defined by characteristics of the 3-D object (i.e. face structure) while the overlaying surface is defined by characteristics of the 2-D image (see, col. 7, lines 60-61, col. 8 lines 7-10), further exemplified in fig. 7 illustrating a 3D object “pushed” into the face of Mona Lisa

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painting to create a 3-D highlighted rendering of Mona Lisa. Accordingly the modified system of Ficco in view of Blanz discloses generating a 3D rendering by “pushing” the 3D object into the original 2D image, wherein the 3D highlighted rendering of the image comprises a portion of the 2D image and the 3D image. It is further noted that the specification claims are generally silent on any additional details of the “pushing” of 3D object into the 2D image for rendering image thereby rendering it non-distinguishable from the teachings in the modified system.

#### **(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Usha Raman/

Conferees:

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Supervisory Patent Examiner

/Christopher Kelley/

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